## Morse, Bob

From: Nace, Charles

Sent: Wednesday, December 26, 2018 11:20 AM

To: Morse, Bob; Singh, Sharissa

Cc: Filipowicz, Urszula

Subject: RE: Seneca Army Depot draft PFAS Expanded Site Investigation (ESI) Work Plan

Bob,

The comments below cover issues I found in the document.

**Chuck Nace** | Environmental Toxicologist | USEPA Region 2 | 290 Broadway, 18th Floor | New York, NY 10007 | T: 212-637-4164 | e-mail: nace.charles@epa.gov

From: Morse, Bob

Sent: Friday, December 14, 2018 3:50 PM

To: Singh, Sharissa <Singh.Sharissa@epa.gov>; Nace, Charles <Nace.Charles@epa.gov>

Cc: Filipowicz, Urszula < Filipowicz. Urszula@epa.gov>

Subject: FW: Seneca Army Depot draft PFAS Expanded Site Investigation (ESI) Work Plan

Sharissa and Chuck,

Don't worry you don't have to read my entire email below. Mainly I just wanted Sharissa to know that I forwarded her comments to the Army more or less verbatim. I don't know if you guys keep a copy of an RPM's final EPA comments to PRP's or not but if you want them here they are.

I obviously added a lot, asking the Army for off and on depot well surveys, that the Army formally notify the new owner of approx. 7,000 acres of the depot about the potential PFAS issue, and that the Army eventually conduct a full RIFS.

In an earlier email I asked the Army to do a formal PA of the entire depot for PFAS. So far all they've identified and sampled is the fire training areas.

Any questions let me know. Thanks

Bob

From: Morse, Bob

**Sent:** Friday, December 14, 2018 2:55 PM **To:** Randy.W.Battaglia@usace.army.mil

Cc: Melissa.Sweet@dec.ny.gov; mark.sergott@health.ny.gov; Pocze, Doug <Pocze.Doug@epa.gov>

Subject: Seneca Army Depot draft PFAS Expanded Site Investigation (ESI) Work Plan

Randy,

EPA has reviewed the Seneca Army Depot draft PFAS Expanded Site Investigation (ESI) Work Plan. EPA comments are presented below.

- 1) It does not appear that the deeper aquifer in the shale bedrock was ever investigated for PFAS impacts. Suggest installing some deep monitoring wells into the competent bedrock in order to confirm that there are no deep impacts.
- 2) The Work Plan indicates that soil was removed from both Sead 25 and Sead 26 to address BTEX and cPAH contamination, respectively. Since the 2017 PFAS SI identified PFAS impacts in the groundwater, was there ever an investigation conducted to determine the presence or absence of PFAS contamination in the soil? If not, EPA requests that the Army conduct an investigation as soon as possible to determine the presence or absence of PFAS contamination in soil, especially at Sead 25, since the PFAS concentrations (92,900 ppb?) are indicative of a residual source area.
- 3) As we have been discussing, a formal groundwater supply well (potable and non-potable) survey needs to be conducted by the Army for the entire former Depot property. Although EPA is in receipt of your 12/10/18 email, which discusses the aquifers located on the former depot property (and we appreciate that information), your email does not appear to directly address any potential groundwater supply wells. Only past and current monitoring wells are discussed, not supply wells. While it may be unlikely that there are any groundwater supply wells on the former depot property, as the former depot was supplied with drinking water from the local municipal water supply, there is still the potential that some individual groundwater supply wells were installed and utilized, especially in the more remote areas of the former depot. In light of the current and planned PFAS investigations (which are obviously not yet completed), the existence of any potential groundwater supply wells needs to be documented at this time through a formal study. Such studies have already been conducted by other branches of DoD at numerous installations. Historic records of former base facilities need to be consulted. These could include documents related to closure of the depot, such as a Base-wide Environmental Baseline Survey (EBS) Report (if such a survey was conducted), and the Base-wide Environmental Impact Statement (EIS). Both documents should have addressed depot water supplies. An EBS would have identified environmental factors, which could include any individual groundwater supply wells that may have been installed and utilized. Lastly, historic depot utility maps can be consulted. These could show any groundwater supply wells that may have been installed and utilized.
- 4) As we have also been discussing, an off-depot private groundwater supply well survey also needs to be conducted by the Army. The off depot area surveyed should extend out to 1 (one) mile from the former depot boundary. The purpose of the survey should be to establish the locations of private groundwater supply wells. Such surveys have already been conducted by other branches of DoD at numerous installations. Please note that EPA is only requesting that an off-depot private well survey be conducted at this time. EPA is not requesting that all private wells within one mile of the former base boundary be sampled at this time. Once the private wells are identified, EPA, the Army, NYSDEC and NYSDOH can then discuss the areas in which sampling for PFAS should be conducted. With respect to how such a survey is conducted, some suggestions include GIS, municipal tax records, and water supply company records. EPA has been told that the Seneca County Department of Health does not require the issuance or approval of well drilling permits. If this is true, conducting the survey may be a little more difficult. Nonetheless, a survey is needed. When initial results are compiled, and the Army and regulatory agencies reach agreement on areas that would require sampling, letters should be sent to the identified property owners. In addition, the Army may ultimately need to "knock on doors". Mark Sergott of NYSDOH (cc'd above) can probably be of some assistance in explaining how to conduct the well survey. He may also be of some assistance in identifying the off-depot wells already identified and sampled by NYSDOH, but it is my understanding that there are privacy issues which may make it difficult for NYSDOH to directly share that information.
- 5) It has come to EPA's attention that the current owner of much of the former depot property, approximately 7,000 acres, plans to subdivide and sell much of his property for re-development. In fact, the potential exists that some of this property has already been resold. It is EPA's understanding that the current owner of this property is an individual named Earl Martin. In light of the status of previous and planned PFAS investigations, EPA hereby requests that the Army formally notify Mr. Martin in writing regarding the potential for PFAS contamination in groundwater beneath his property. The notification should include a request that Mr. Martin also notify any recent owners he may have transferred property to, as well as any potential future owners he may eventually discuss property transfer with, regarding the potential for PFAS contamination in groundwater

beneath the properties. While your 11/30/18 email to EPA documents your prior discussions with Mr. Martin, it does not indicate that you formally notified him in writing. EPA considers the formal notification to Mr. Martin essential at this time, and requests that you cc us on your letter. Your 11/30/18 email to EPA also included an attachment with proposed subdivision plots of Mr. Martin's property. Also included on that attached figure are existing municipal water lines as well as proposed water lines. While this implies that no groundwater supply wells will be installed by Mr. Martin or future property owners, there is no guarantee of this. Some of the proposed lines are somewhat long, and could potentially be somewhat difficult and/or expensive to install. You have indicated that Mr. Martin intends to install the proposed lines, but again, there is no guarantee that all of the proposed lines will be installed. Hence the need for the notification letter that EPA is requesting at this time. The letter should discourage the installation of any groundwater supply wells until such time as PFAS studies related to the former depot have been completed and it has been shown either that there is no actual PFAS contamination beneath any of the properties, or no reason to suspect that any PFAS contamination might exist beneath the properties. In addition, should any groundwater supply wells be installed on the properties prior to the completion of PFAS studies related to the former depot, they should be sampled for PFAS prior to use, and face the potential that point of entry treatment (POET) systems would need to be installed to treat any groundwater found to be contaminated with PFAS above EPA's Health Advisory Level (HAL) of 70 parts per trillion (ppt) for combined and/or individual PFOS and PFOA.

6) Please note that EPA expects that at some point in the future the Army will conduct a full RIFS for PFAS at the former depot, to include sampling of all media, as well as human health and ecological risk assessments. This would be followed by the issuance of a Proposed Plan and ROD for PFAS at the former depot.

## **Additional Specific Comments:**

- Section 3.01 indicates that the proposed wells will be installed to refusal or top of competent bedrock. Please include a range of depth to bedrock in this section or Section 2.3.
- Section 3.0.5.3 indicates that the gw samples will be submitted to a DoD approved and NYS certified laboratory for analysis. Pleas confirm that the gw samples will analyzed in accordance with EPA Method 537.1.1, modified if needed.
- Section 3.1.1.1 indicates that there is an open drainage ditch located at Sead 25. Suggest collecting a water sample from the drainage ditch to confirm that PFAS contamination does not exist in the local surface water flow regime.
- Figure 2 depicts gw contours and the proposed well locations. Suggest installing two (2) additional wells in the E-SE quadrant since the gw flow is radial around MW25-2 (which contains the highest concentrations of PFAS) and gw contours appear to have a steep gradient towards the E-SE direction.

## **End of Comments**

Please let me know if you have any questions. Thank you.

Bob

Bob Morse Remedial Project Manager USEPA Region 2 Emergency and Remedial Response Division Federal Facilities Section 290 Broadway 18th Floor New York, NY 10007-1866 Phone: (212) 637-4331